

## **Occupational Radiation Safety Cornerstone Inspection Finding Significance Determination**

### **Answers to Examples**

1. Upon exiting the spent fuel transfer canal during a job ....

**a) Is this a Violation?**

Yes. Failure to survey per 20.1501.

**b) Is this a Performance Indicator hit?**

Yes. No intended intake for the job, therefore whole bone dose is unintended exposure. Since 35 rem is greater than 10% of the stochastic limit for the surface of the bone, it meets the definition of a PI.

**c) What is the significance (color) of this finding? Why?**

White. Since it was only luck that the workers stopped work half way through (and if they had continued with no break they would have exceeded the bone surface dose limit), this event constituted a substantial potential for over exposure.

2. While passing by a roped area with flashing lights....

**a) Is this a Violation?**

Yes. Failure to control HRA < 1000 mrem/hr., per their Tech. Specs.

**b) Is this a Performance Indicator hit?**

No. Dose rates less than 1000 mrem/hr - does not meet definition of PI.

**c) What is the significance (color) of this finding? Why?**

Green inspection finding. Repeated failures does not increase the significance of the issue. It may indicate a problem with the licensee's problem identification and resolution program.

3. An HP foreman at a PWR that has been permanently assigned...

**a) Is this a Violation?**

Yes. Permanently assigning a HRA key (especially a potential VHRA) does not meet the Tech. Spec. requirement for administrative control by the RPM.

**b) Is this a Performance Indicator hit?**

Yes. Failure to control locked HRA per Tech. Specs.

**c) What is the significance (color) of this finding? Why?**

Green. No dose consequences.

4. In No. 3 above, ... thimbles were withdrawn ... 30 rem DDE to his upper leg.

**a) Is this a Violation?**

Yes, several. In addition to that noted in #3 above, licensee failed to control dose within dose limit.

**b) Is this a Performance Indicator hit?**

Yes. Unintended exposure in excess of 100 mrem.

**c) What is the significance (color) of this finding? Why?**

Yellow. Unintended dose in excess of 5 rem, but less than 50 rem, TEDE.

5. A work package has been put together... inadequate ALARA review ... resulting total dose for the valve replacement was 32 rem.

**A) Is this a violation?**

Probably not (may be some minor procedural compliance issues involved)

**B) Is this a Performance Indicator hit?**

No. PIs do not cover ALARA issues.

**C) What is the significance (color) of this finding: Why?**

White. Actual dose exceeded planned by > 50 % ; and 3-year ave. collective dose > 135 p-rem. Actual dose for job > 25 p-rem but 3-year ave. < 340 p-rem.